

[54] **GLASS SEALED THIN-FILM  
ELECTROLUMINESCENT DISPLAY PANEL  
FREE OF MOISTURE AND THE  
FABRICATION METHOD THEREOF**

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[57] **ABSTRACT**

A thin-film electroluminescent display panel is sealed by a pair of glass substrates for protection from the environment. A protective liquid is introduced between a counter glass substrate and a substrate for supporting the electroluminescent display unit. The protective liquid comprises silicone oil or grease which assures the thin-film electroluminescent film of preservation in the electroluminescent display panel. The counter glass substrate is bonded to the support substrate through an adhesive of, for example, photo-curing resin. A capillary tube is provided within the glass substrate for injecting the liquid under vacuum conditions. The liquid has the capability of spreading into pin holes generated on dielectric layers, and is resistant to high voltage, high humidity and high temperature and is inert to layers constituting the thin-film electroluminescent display panel and has a small vapour pressure and a small coefficient of thermal expansion. A moisture absorptive member is introduced into the protective liquid. The member can be an Al film coated by silica gel or silica gel particles themselves. The silica gel particles, if necessary, may be confined within a tube or dispersed within the spacer. Alternatively, they are dispersed within the protective liquid. The Al film is adhered to one of the substrates. The member serves to absorb moisture contained within the protective liquid. The protective liquid can be colored by a dye material to provide a background for the EL device.

28 Claims, 7 Drawing Figures

